

(19)

Europäisches Patentamt

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(11)

EP 0 737 980 A3

(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3:
16.04.1997 Bulletin 1997/16

(43) Date of publication A2:
16.10.1996 Bulletin 1996/42

(21) Application number: 96105819.5

(22) Date of filing: 12.04.1996

(51) Int. Cl.⁶: G11B 27/32, G11B 27/10,
G11B 27/034, G11B 19/02,
G11B 27/34, G11B 27/00,
H04N 5/85, H04N 5/92,
H04N 5/926, H04N 5/93,
H04N 7/52, H04N 9/804,
H04H 1/00
// G11B7/00

(84) Designated Contracting States:
AT BE CH DE ES FR GB IT LI LU NL SE

(30) Priority: 14.04.1995 JP 114017/95

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(54) Recording medium capable of interactive reproduction and reproducing system for the same

(57) On an optical disk, video object sets (VTST_VOBS) (295) to be reproduced and video title set information (VTSI) serving as management information table (101, 294, 300, 304) on the video object sets have been stored. In each video object set (VTST_VOBS) (295), a lot of data cells (105, 284), each containing video, audio, and sub-picture data, are arranged. Management information table (101, 294, 300, 304) on programs chains, which are combinations of programs to be reproduced one after another, has been written in a video title set PGC table (VTS_PGCIT). By referring to the PGC table (VTS_PGCIT) according to the user's input, the playback order of PGCs can be changed, enabling the PGCs to be reproduced one after another in various modes.

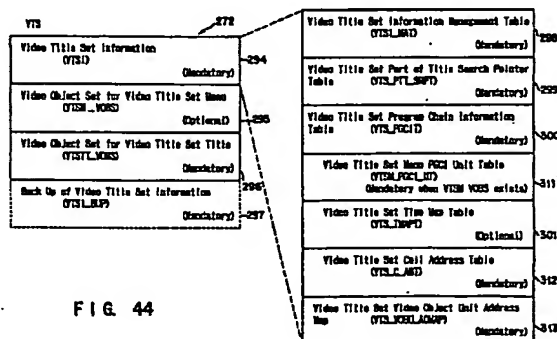


FIG. 44

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EUROPEAN SEARCH REPORT

Application Number
EP 96 10 5819

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
X	WO 83 02839 A (HON, D.)	1,2, 12-15, 19,21, 22,28, 35-42, 51,52, 65-70	G11B27/32 G11B27/10 G11B27/034 G11B19/02 G11B27/34 G11B27/00 H04N5/85 H04N5/92 H04N5/926 H04N5/93 H04N7/52 H04N9/804 H04H1/00 //G11B7/00
	* page 5, line 25 - page 24, line 11; figure 17 *		
P,X	EP 0 685 845 A (K.K.TOSHIBA ET AL.)	1,2,4, 7-9,16, 19-22, 25, 30-32, 43,44, 48-52, 55, 60-62, 73-80	
	* column 3, line 37 - column 5, line 8 * * column 6, line 43 - column 8, line 55 * * column 9, line 34 - column 19, line 48; claims 1,6-15,17-20 * L: applicant		

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The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 11 February 1997	Examiner Daalmans, F
CATEGORY OF CITED DOCUMENTS X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category A: technological background O: non-written disclosure P: intermediate document T: theory or principle underlying the invention E: earlier patent document, but published on, or after the filing date D: document cited in the application L: document cited for other reasons & : member of the same patent family, corresponding document			

EPO FORM 1503 01.82 (P04C01)

EP 0 737 980 A3



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EUROPEAN SEARCH REPORT

Application Number
EP 96 10 5819

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
E	EP 0 730 272 A (K.K.TOSHIBA)	1-9,11, 12, 16-32, 34-36, 43-62, 65,66, 71-89, 92, 96-108, 112, 116-129, 136-140	
	* the whole document * L: applicant ---		
E	EP 0 737 979 A (K.K.TOSHIBA)	1-9,11, 12, 16-32, 34-36, 43-62, 65,66, 71-89, 92, 96-108, 112, 116-129, 136-140	TECHNICAL FIELDS SEARCHED (Int.Cl.6)
	* the whole document * L: applicant ---		
		-/--	
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 11 February 1997	Examiner Daalmans, F
CATEGORY OF CITED DOCUMENTS		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons A : technological background O : non-written disclosure P : intermediate document & : member of the same patent family, corresponding document	
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category			

EPO FORM 1503 01.91 (P0400)

EP 0 737 980 A3

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EUROPEAN SEARCH REPORT

Application Number
EP 96 10 5819

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
E	EP 0 724 264 A (K.K.TOSHIBA)	1,6,8,9, 12,16, 20,21, 28-31, 35,36, 42-44, 49-51, 60-62, 65,66, 71-74, 79-81	
E	* the whole document *	88,89, 92,96, 100,101, 108,109, 112,116, 119-129, 136-140	
E	L: applicant ---		
E	EP 0 714 098 A (K.K. TOSHIBA)	1,6,8,9, 12,16, 20,21, 28-31, 35,36, 42-44, 49-51, 60-62, 65,66, 71-74, 79-81	TECHNICAL FIELDS SEARCHED (Int.Cl.6)
E	* the whole document *	88,89, 92,96, 100,101, 108,109, 112,116, 119,120	
	L: applicant --- -/--		
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EPO FORM 1301 03.92 (P04C01)

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Office

EUROPEAN SEARCH REPORT

Application Number
EP 96 10 5819

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
P,A	WO 95 12275 A (TIME WARNER ENTERTAINMENT CO., L.P.) * page 3, line 5 - page 5, line 2 * * page 8, line 13 - page 32, line 28 * * page 38, line 23 - page 63, line 23 * ---	1-10, 12-16, 20-32, 35-44, 49-58, 60-62, 65-74, 79,80	TECHNICAL FIELDS SEARCHED (Int.Cl.6)
A	EP 0 614 188 A (SONY CORPORATION) * the whole document * ---	1,11-14, 21, 34-40, 51, 64-70, 81, 91-95, 101, 111-114	
A	US 5 161 034 A (KLAPPERT) * the whole document * ---	1,11-14, 20,21, 34-40, 49-51, 64-70	
A	US 4 333 152 A (BEST) * column 3, line 65 - column 5, line 56 * --- -/--	1,11-14, 21, 34-40, 51,64-70	
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 11 February 1997	Examiner Daalmans, F
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons A : member of the same patent family, corresponding document</p>			

EPO FORM 1503 (01.91) (P04001)

EP 0 737 980 A3



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EUROPEAN SEARCH REPORT

Application Number
EP 96 10 5819

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
A	EP 0 325 325 A (PHILIPS AND DU PONT OPTICAL COMPANY)	1,6-9, 12,14, 16,20, 21,28, 30-32, 35-40, 43,44, 49-51, 58, 60-62, 65-80	<div>TECHNICAL FIELDS SEARCHED (Int.Cl.6)</div>
A	* the whole document * --- EP 0 542 377 A (PHILIPS ELECTRONICS UK LIMITED)	1,6, 12-14, 20,21, 28, 35-40, 49-51, 65-70, 79,80	
A	* the whole document * --- EP 0 635 835 A (SONY CORPORATION)	1-3,16, 19,21, 22,30, 43,51, 52,60, 78,81, 82,88, 101,102, 108	
	* abstract * * column 8, line 6 - column 29, line 54 * --- -/--		
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 11 February 1997	Examiner Daalmans, F
<div> <div> <p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone</p> <p>Y : particularly relevant if combined with another document of the same category</p> <p>A : technological background</p> <p>O : non-written disclosure</p> <p>P : intermediate document</p> </div> <div> <p>I : theory or principle underlying the invention</p> <p>E : earlier patent document, but published on, or after the filing date</p> <p>D : document cited in the application</p> <p>L : document cited for other reasons</p> </div> </div>			

EPO FORM L50 03.92 (P4/C01)

EP 0 737 980 A3



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EUROPEAN SEARCH REPORT

Application Number
EP 96 10 5819

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
A	EP 0 644 692 A (K.K.TOSHIBA)	1,8,9, 16,21, 30-32, 43,44, 51, 60-62, 73,74, 81,88, 89,96, 101,108, 109,116	
	* the whole document *		
A	WO 94 07332 A (SONY CORPORATION)	1,8,16, 21,30, 43,51, 60,81, 88,96, 101,108, 116	
	* the whole document *		
A	PATENT ABSTRACTS OF JAPAN vol. 95, no. 003 & JP 07 079399 A (HITACHI LTD;OTHERS: 01), 20 March 1995, * abstract *	1-120	TECHNICAL FIELDS SEARCHED (Int.Cl.6)
A	WO 94 30014 A (SONY CORPORATION)	1,21,51, 81,101, 121	
	* page 40, line 20 - page 48, line 10 * * page 53, line 9 - page 55, line 4 * * page 59, line 21 - page 70, line 15 * --- -/--		
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 11 February 1997	Examiner Daalmans, F
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EPO FORM 1503 01.92 (P04C01)

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Application Number
EP 96 10 5819

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.CL.6)
A	EP 0 389 689 A (PHILIPS AND DU PONT OPTICAL DEUTSCHLAND GMBH.) * the whole document * ---	1,51, 121,128, 136	
A	EP 0 460 751 A (N.V.PHILIPS'GLOEILAMPENFABRIEKEN) * the whole document * ---	1,51,81, 101,121, 128,136	
A	EP 0 460 764 A (N.V.PHILIPS'GLOEILAMPENFABRIEKEN) * the whole document * ---	1,51,121	
P,A	EP 0 680 216 A (THOMSON CONSUMER ELECTRONICS, INC.) * the whole document * -----	121,128, 136	
			TECHNICAL FIELDS SEARCHED (Int.CL.6)
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 11 February 1997	Examiner Daalmans, F
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EPO FORM 1503 (01.87) (P04C01)



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CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing more than ten claims.

- ☐ All claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for all claims.
- ☐ Only part of the claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid, namely claims:
- ☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirement of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet -B-

- ☒ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.
- ☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respects of which search fees have been paid, namely claims:
- ☐ None of the further search fees has been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:



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LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirement of unity of invention and relates to several inventions, namely:

1. Claims 1-120 : Record medium and recording and playback apparatus/method therefor.
2. Claims 121-140 : Broadcasting/transmission system.